Does Not Comply Corrected Diskette Needed



OIPE

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/957,458 TIME: 10:04:36

Input Set : A:\P66567USO-seqlist.txt Output Set: N:\CRF3\06252002\1957458.raw

- 3 <110> APPLICANT: Chen-Bettecken
- Yu-Hua Una
- .6 <120> TITLE OF INVENTION: Method for growing stem cells
- 8 <130>-FILE REFERENCE: Una Chen
- 10 <140> CURRENT APPLICATION NUMBER: US 09/957,458
- C--> 12 <141> CURRENT FILING DATE: 2002-06-13
 - 14 <160> NUMBER OF SEQ ID NOS: 9
 - 16 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

- 18 <210> SEQ ID NO: 1
- 20 <211> LENGTH: 7969
- 22 <212> TYPE: DNA
- 24 <213> ORGANISM: Homo sapiens
- 26 <400> SEQUENCE: 1
- -> 28 gctagcgatt taggtgacac tatagaatag atctcgachh ngtcacccct agagtcgagc 60 E--> 29 tgtgacggtc cttacaatga aatgcanctg ggttatcttc ttcctgatgg caggggttac 120 30 aggtaagggg ctcccaagtc ccaaacttga gggtccataa actctgtgac agtggcaatc 180
 - 31 actitgeett tetttetaea ggggtgaatt eggettteae agageattea eegetgaeee 240 32 ctcaccgtcg ggacctctgt agccgctcta tctggctagc aaggaagatt cgttcagacc 300
 - 33 ttgactgctc ttacggaatc ctatgtaagt tgcctatttt gctgttatct gttttccctt 360 34 catctttttt gatccagcaa cttaccatca cgcatcagct ccattaccaa ttgtgaaagc 420
 - 36 atgtgacttt attttettee tetgggetgt ttaggagatg aagttaettg aatgagaaaa 540
- E--> 38 ttggccatat attctgaata ctacctagaa cagattagcc atgggccctn)tgggttnttc 660
- E--> 39 ataagccatt gttctgaant tttttagctt tgtaaatgaa aggtttatgg gataggaaga 720 E--> 40 gtnctatgaa cgtgggagga atttgtaaat cctaccaatt tntnctatat agcattagcc 780
- E--> 41 cccacctttt antattctgc atcaaaagta agattgtgtc taaagagaaa ggtnagctat 840
- E--> 42 caaaaggact cctataahat tonttggaaa ctthtggaaan tgtcaaattt fitttgagcta 900 E--> 43 attrictggag ttccaaantt tgtcttnina cagthaaggg gganocccat tcanatttne 960
- E--> 44 ccccctinning anatgettg ggggaaaaaa cctinccaacc confitgtggg angaagtttt 1020
- E--> 45 tttaannttt tääggetngn ngaaaenggn ttttaatttt ttgggnenan egeetnteee 1080 E--> 46 cggtaccagg aaaatcagga cctntttttg gggnngngcn ccnacngggg ggnaaaangg 1140
- E--> 47 gaaatttent canaaaaaat etttteegnn nnnngtgaag cateagggee tgaacaagaa 1200 48 catcaacctg gactctgcgg atgggatgcc agtggcaagc actgatcagt ggagtgagct 1260
 - 49 gaccgaggca gagcgactcc aagagaacct tcaagcttat cgtaccttcc atgttttgtt 1320
 - 51 agetatacat accettette tecaagtege tgeetttgea taccagatag aggagttaat 1440 52 gatactectg gaatacaaga teeceegeaa tgaggetgat gggatgeeta ttaatgttgg 1500
 - 53 agatggtggt ctctttgaga agaagctgtg gggcctaaag gtgctgcagg agctttcaca 1560

, see page 7

- 50 ggccaggctc ttagaagacc agcaggtgca ttttacccca accgaaggtg acttccatca 1380

RAW SEQUENCE LISTING

DATE: 06/25/2002 PATENT APPLICATION: US/09/957,458 TIME: 10:04:36

Input Set : A:\P66567US0-seqlist.txt Output Set: N:\CRF3\06252002\1957458.raw

	54	gtggacagta	aggtccatcc	atgacette	, tttcatttct	tctcatcaga	ctgggatccc	1620
E	, ,,	agcacgiggg	, agccattata	ttgctaacaa	i caagaaaatg	tagnnnnngc	aacctacaca	1600
	50	guduuddag	acyttaaaqq	qatqaaacca	i caagacttac	cttcactcaa	aagtaaaaag	1740
	57	acaacacacac	: acagilitigo	ccqttttcat	. gagaaatggg	acatetacae	2002220000	1000
	50	ccgccgcerg	ayyayyactt	gtacaaacac	: gatctatgca	ggtttcccca	actgacacaa	1860
	33	accycycaac	LLYddactcc	gcctqqtctt	: tccaqqtcta	gaggggtaac	attttatact	1020
	00	gigiligact	ccacgetega	tccactage	r agtgttagta	gcggtactgc	tatataataa	1000
-	OI	cygaycatyt	. Lyyccgtgqq	aacacctcct	. tggtaacaag	. dacccacada	accus a sacc	2040
	.02	atyteetaae	gyacccaaca	tqtqtqcaac	CCCaqcacqq	cagetttaet	atassagas	2100
	0.5	ccccaaggcg	, acallyalac	tqqtactcaa	acactggtga	caddctaadd	atoggattas	2160
٠	04	gytacccccya	yytaacaagc	gacactcgqq	atctgagaag	gggactggga	Cttctttaaa	2220
	0.5	gigecçagic	Laaaaagctt	ctacgcctga	ataggtgacc	ggagggggg	acctttcctt	2280
	ŅΟ.	Laraccac	Lyaacacatg	gaagacgcca	aaaacataaa	gaaagggggg	gcgccattct	2340
• .	0 /	acceletaga	ggatggaacc	gctggagagc	aactgcataa	ggctatgaag	agatacgccc	2400
	, 00.	Lygiloctgg	aacaattqct	tttacagatg	· cacatatega	ggtgaacatc	acatacaca	2460
-	. 03	aatacttcga	aatgtccgtt	caattaacaa	aagctatgaa	acqatatqqq	ctcaatacaa	2520
1.	. 7.0	-accacayaat	cglcgtatgc	agtgaaaact	ctcttcaatt	ctttatgeeg	atattaaaaa	2500
	/ 1	cyclatitat	cygagttgca	gttgcgcccg	cgaacgacat	ttataatgaa.	catasattas	2640
	12	ccaacaytat	gaacatttcg	caqcctaccq	tagtgtttgt	ttccaaaaag	agattages	2700
:	/ 3	aaa <u>uu</u> uugaa	cgtgcaaaaa	aaattaccaa	taatccagaa	aattattatc	atggatteta"	2760
	/4	aaacyyatta	ccagggattt	cagtcqatqt	acacottcot	cacateteat	ctacctccca	2820
-	73	gittitaatga.	atacqatttt	gtaccagagt	cctttgatcg	tracaaaaca	attggagtga	2000
	70.	caacyaacic	ctetggatet	actgggttac	ctaagggtgt	gaccetteeg	catagaactg	2040
	,,	ccigcytcay	accedeac	gccagagatc	Ctatttttgg	caatcaaatc	attecognata	3000
J 77 :	70.	CLYCYALLL	aagegeegee	ccattccatc	acqqttttqq	aatgtttact	acactcggat	3060 1
	13	accegatacg	tggatttcga	gtcgtcttaa	tqtataqatt	tgaagaagag	ctatttttac	3120
	00	gatecettea	ggattacaaa	attcaaagtg	cattactaat	accaacccta	ttttcattat	2100
.5	. от.	Legeçadagg	cactctgatt	gacaaatacg	atttatctaa	tttacaccaa	attacttata	2240
	02	ggggcgcacc	Lucutudgada	qaaqtcqqqq	aagcggttgc	aaaacgcttc	catottooac	2200
	0.5	ggatacgata	ayyatatyqq	ctcactgaga	·ctacatcage	tattctdatt	2020000200	2260
====	0.4	yyyatyataa	accyggcgcg	qtcqqtaaaq	ttgttccatt	ttttgaageg	aaggttgtgg	2420
	8.5	atctggatac	cgggaaaacg	ctgggcgtta	atcagagagg	cgaattatgt	atcadagag	3420
	00	cialgalial	greeggreat	gtaaacaatc	Cogaagcgac	Caacacctta	attaaaaaaa	2510
	07	arggarggct	acattctqqa	gacatagett	actgggacga	agacgaacac	tfattastsa	3600 .
بشفيت	. 00	Ligadicycii	gaagtettta	attaaataca	aaggatatca	gatageceee	aataaattaa :	266A .
	09	aattyatatt	yllacaacac	cccaacatct	tegaegeggg.	Catagosaat	attaggassa	2720
• •	JU 1	acyacyccyy	Lyadellece	accaccatta	ttatttaga	ncaconnaaan	accetcacce :	2700
	J (audaayayat	cycygallac	quedecagre	aagtaacaac	CCCCGGGGGGGG	ttacaaaaaa '	
	92	gagttgtgtt	tgtggacgaa	gtaccgaaag	gtcttaccgg	aaaactcgac (rcaaraaaaa :	2010
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ccayayayat	CCCCacaaaq	qccaaqaaqq	acadaaaatc	caaattotaa :	aatataaata 3	2060
	94 1	tattcagcga	tgacgaaatt	cttagctatt	gtaatgactc	tagaggatct	ttatassas /	1020
	93 6	accitactic	Lgiggigtaga	cataattgga	caaactacct .	acadadattt :	a a gratata a	1000
	20 6	gylaaalala	adatttttaa	qtqtataatq	tgttaaacta i	ctoattotaa 1	++a++a+a+	1140
	21 6	iccicayaci (ccaacctatq	qaactqatqa	atgggaggag -	taataassa (ortttaaten 4	1200
	30 G	gyaaaaccccg	LLLLYCTCAG	aagaaatgcc	atctagtgat d	matmammeta /	staatasata A	1260
	<i>33</i> (Laacattet (actectecaa .	aaaaqaaqaq	aaaggtagaa (TACCCCSSGG S	atttaatta 1	220
	100	agaattytta	ayılılılıga	greargergr	gtttagtaat	agaactetta	cttactttac	1200
	101	Latttacacc	acaaaggaaa	aagctgcact	qctatacaaσ	aaaattatgg	aaaaatatto	4440
	102	tgtaaccttt	ataagtaggc	ataacagtta	taatcataac	atactgtttt	ttettaetee	4500
			- 33	,		- sacing cell	CCCCCACCCC	4 300

RAW SEQUENCE LISTING DATE: 06/25/2002 PATENT APPLICATION: US/09/957,458 TIME: 10:04:36

Input Set : A:\P66567USO-seqlist.txt
Output Set: N:\CRF3\06252002\1957458.raw

in the second control of the control

103 acacaggcat agagtgtctg ctattaataa ctatgctcaa aaattgtgta cctttagctt 4560 ·104 tttaatttgt aaaggggtta ataaggaata tttgatgtat agtgccttga ctagagatca 4620 105 taatcagcca taccacattt gtagaggttt tacttgcttt aaaaaaacctc ccacacctcc 4680 106 ccctgaacct gaaacataaa atgaatgcaa ttgttgttgt taacttgttt attqcaqctt 4740 107 ataatggtta caaataaagc aatagcatca caaatttcac aaataaagca tttttttcac 4800 108 tgcattctag ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc tggatccccg 4860 109 ggtccctata gtgagtcgta ttagcttggc gtaatcatgg tcatagctgt ttcctgtgtg 4920 110 aaattgttat ccgctcacaa ttccacacaa catacgagcc ggaagcataa agtgtaaagc 4980 111 ctggggtgcc taatgagtga gctaactcac attaattgcg ttgcgctcac tgcccgcttt 5040 112 ccagtcggga aacctgtcgt gccagctgca ttaatgaatc ggccaacgcg cggggagagg 5100 113 eggtttgegt attgggeget etteegette etegeteact gactegetge geteggtegt 5160 114 tcggctgcgg cgagcggtat cagctcactc aaaggcggta atacggttat ccacagaatc 5220 115 aggggataac gcaggaaaga acatgtgagc aaaaggccag caaaaggcca ggaaccgtaa 5280 116 aaaggccgcg ttgctggcgt ttttccatag gctccgccc cctgacgagc atcacaaaaa 5340 117 tegacgetea agteagaggt ggegaaaeee gacaggaeta taaagataee aggegtttee 5400 118 ccctggaage teectegtge geteteetgt teegaceetg eegettaceg gatacetgte 5460 119 egeetttete eettegggaa gegtggeget tteteaatge teaegetgta ggtateteag 5520 120 ttcggtgtag gtcgttcgct ccaagctggg ctgtgtgcac gaaccccccg ttcagcccga 5580 121 ccgctgcgcc ttatccggta actatcgtct tgagtccaac ccggtaagac acgacttatc 5640 122 gccactggca gcagccactg gtaacaggat tagcagagcg aggtatgtag gcggtgctac 5700 123 agagttcttg aagtggtggc ctaactacgg ctacactaga aggacagtat ttggtatctg 5760 124 cgctctgctg aagccagtta ccttcggaaa aagagttggt agctcttgat ccggcaaaca 5820 125 aaccaccgct ggtagcggtg gtttttttgt ttgcaagcag cagattacgc gcagaaaaaa 5880 126 aggateteaa gaagateett tgatetttte taeggggtet gaegeteagt ggaacgaaaa 5940 - 127 ctcacgttaa gggattttgg tcatgagatt atcaaaaagg atcttcacct agatcctttt 6000 128 aaattaaaaa tgaagtttta aatcaatcta aagtatatat gagtaaactt ggtctgacag 6060 129 ttaccaatgo ttaatcagtg aggoacctat ctcagcgatc tgtctatttc gttcatccat 6120 130 agetgeetga eteccegteg tgtagataac tacgatacgg gagggettac catetggeec 6180 131 cagtgctgca atgataccgc gagacccacg ctcaccggct ccagatttat cagcaataaa 6240 132 ccagccagcc ggaagggccg agcgcagaag tggtcctgca actttatccg cctccatcca 6300 133 gtctattaat tgttgccggg aagctagagt aagtagttcg ccagttaata gtttgcgcaa 6360 134 cgttgttgcc attgctacag gcatcgtggt gtcacgctcg tcgtttggta tggcttcatt 6420-135 cageteeggt teceaacgat caaggegagt tacatgatee eccatgttgt geaaaaaage 6480 136 ggttagetee tteggteete egategttgt cagaagtaag ttggeegeag tgttateact 6540 137 catggttatg gcagcactgc ataattctct tactgtcatg ccatccgtaa gatgcttttc 6600 138 tgtgactggt gagtactcaa ccaagtcatt ctgagaatag tgtatgcggc gaccgagttg 6660 139 ctcttgcccg gcgtcaatac gggataatac cgcgccacat agcagaactt taaaagtgct 6720 140 catcattgga aaacgttctt cggggcgaaa actctcaagg atcttaccgc tgttgagatc 6780 141 cagttcgatg taacccactc gtgcacccaa ctgatcttca gcatctttta ctttcaccag 6840 142 cgtttctggg tgagcaaaaa caggaaggca aaatgccgca aaaaagggaa taagggcgac 6900 143 acggaaatgt tgaatactca tactcttcct ttttcaatat tattgaagca tttatcaggg 6960 144 ttattgtctc atgagcggat acatatttga atgtatttag aaaaataaac aaataggggt 7020 145 teegegeaca titteeeegaa aagtgeeace tgaegtetaa gaaaceatta titateatgae 7080 146 attaacctat aaaaataggc gtatcacgag gccctttcgt ctcgcgcgtt tcggtgatga 7140 147 cggtgaaaac ctctgacaca tgcagctccc ggagacggtc acagcttgtc tgtaagcgga 7200 148 tgccgggagc agacaagccc gtcagggcgc gtcagcgggt gttggcgggt gtcggggctg 7260 149 gcttaactat gcggcatcag agcagattgt actgagagtg caccatatgc ggtgtgaaat 7320 150 accgcacaga tgcgtaagga gaaaataccg catcaggcgc cattcgccat tcaggctgcg 7380 151 caactgttgg gaagggcgat cggtgcgggc ctcttcgcta ttacgccagc tggcgaaagg 7440

RAW SEQUENCE LISTING DATE: 06/25/2002 PATENT APPLICATION: US/09/957,458 TIME: 10:04:36

Input Set : A:\P66567USO-seqlist.txt
Output Set: N:\CRF3\06252002\1957458.raw

```
152 gggatgtgct gcaaggcgat taagttgggt aacgccaggg ttttcccagt cacgacgttg 7500 .....
      153 taaaacgacg gccagtgaat ttcgacctgc agtcgacaga agccttacgt gacagctggc 7560
      154 gaagaaccat ggccagctgg tgacaagcca aaacagctct ggctcgcaaa acatgttccc 7620
      155 ttggctgctt tccacttccc cttgtgcttt gtttacttgt gtcagctggt tggctcccta 7680
      156 ggtatgaget catgettgge tggcagecat ccagttttag ccagetetge tttgtttact 7740
      157 tgtgtcagct ggttggctcc ctaggtatga gctcatgctt ggctggcagc catccagttt 7800
      158 tagccagete etecetacet tecettttt ttatatatae aggaggeega ggeegeetee 7860
      159 gcctccaagc ttactcagaa gtagtaaggg cgtggaggct ttttaggagg ccagggaaat 7920
      160 tcccttgttt ttcccttttt tgcagtaatt ttttgctgca aaaagctaa
      292 <210> SEQ ID NO: 3
      294 <211> LENGTH: 7558
      296 <212> TYPE: DNA
      298 <213> ORGANISM: Homo sapiens
      300 <400> SEQUENCE: 3
 E--> 302 gctagcgatt taggtgacac tatagaatct cgacnngtca cccctagagt cgagctgtga 60
 E--> 303 cggtccttac aatgaaatgc anctgggtta tcttcttcct gatggcaggg gttacaggta 120
      304 aggggetece aagteecaaa ettgagggte cataaactet gtgacagtgg caatcacttt 180
      305 gcctttcttt ctacaggggt gaattcggct ttcacagagc attcaccgct gacccctcac 240
      306 cgtcgggacc tctgtagccg ctctatctgg ctagcaagga agattcgttc agaccttgac 300
      307 tgctcttacg gaatcctatg taagttgcct attttgctgt tatctgtttt cccttcatct 360
      308 tttttgatcc agcaacttac catcacgcat cagctccatt accaattgtg aaagctctaa 420
   . 309 tcatatagtc attcatatag gttatttgac atgggccctt cccttgagga aacccatgtg 480
      310 actttatttt cttcctctgg gctgtttagg agatgaagtt acttgaatga gaaaatatat 540
      311 atggagttct agaaaggatt ggtttatatg tcttggaggc tatttcaaaa tttatttggc 600
 E--> 312 catatattet gaatactace tagaacagat tagecatggg ceetntgggt tnttcataag 660
 E--> 313 ccattgttct gaantttttt agctttgtaa atgaaaggtt tatgggatag gaagagtnct 720
 E--> 314 atgaacgtgg gaggaatttg taaatcctac caatttntnc tatatagcat tagccccac 780
 E--> 315 cttttantat tctgcatcaa aagtaagatt gtgtctaaag agaaaggtna gctatcaaaa 840
E--> 316 ggactcctat aanattcntt ggaaacttnt ggaantgtca aatttntttg agctaattnt 900
E--> 317 tggagttcca aantttgtct tntnacagtn aaggggganc cccattcana tttnccccc 960
E--> 318 tnnnganaat gcttggggga aaaaacctnc caaccccntt gtgggangaa gttttttaa 1020
E--> 319 nnttttaagg ctngnngaaa enggntttta attttttggg nenanegeet nteeeeggta 1080
E--> 320 ccaggaaaat caggacctnt ttttggggnn gngcnccnac nggggggnaa aangggaaat 1140
E--> 321 ttcntcanaa aaaatctttt ccgnnnnnng tgaagcatca gggcctgaac aagaacatca 1200
     322 acctggactc tgcggatggg atgccagtgg caagcactga tcagtggagt gagctgaccg 1260
     323 aggcagagcg actccaagag aaccttcaag cttatcgtac cttccatgtt ttgttggcca 1320
     324 ggctcttaga agaccagcag gtgcatttta ccccaaccga aggtgacttc catcaagcta 1380
     325 tacataccct tettetecaa gtegetgeet ttgcatacca gatagaggag ttaatgatac 1440
     326 tcctggaata caagatcccc cgcaatgagg ctgatgggat gcctattaat gttggagatg 1500
     327 gtggtctctt tgagaagaag ctgtggggcc taaaggtgct gcaggagctt tcacagtgga 1560
     328 cagtaaggte catecatgae ettegtttea tttettetea teagaetggg ateceageae 1620
E--> 329 gtgggagcca ttatattgct aacaacaaga aaatgtagnn nnngcggcct gcgccgtctt 1680
     330 tecegaegtt aaagggatga aaccacaaga ettacetteg eteggaagta aaacgacaaa 1740
     331 cacacacagt tttgcccgtt ttcatgagaa atgggacgtc tgcgcacgaa acgcgccgtc 1800
     332 gcttgaggag gacttgtaca aacacgatct atgcaggttt ccccaactga cacaaaccgt 1860
     333 gcaacttgaa actccgcctg gtctttccag gtctagaggg gtaacatttt gtactgtgtt 1920
     334 tgactccacg ctcgatccac tagcgagtgt tagtagcggt actgctgtct cgtagcggag 1980
     335 catgttggcc gtgggaacac ctccttggta acaaggaccc acggggccga aagccatgtc 2040
     336 ctaacggacc caacatgtgt gcaaccccag cacggcagct ttactgtgaa acccacttca 2100
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/957,458

DATE: 06/25/2002 TIME: 10:04:36

Input Set : A:\P66567USO-seqlist.txt Output Set: N:\CRF3\06252002\1957458.raw

	337	7 addtdacati	r datactoot	atannaa.				
	338	Coccacata:	t gatactggta	tecadacaci	L ggtgacaggo	c taaggatge	c cttcaggta	2160
	330) cantttaaa	a caagcgacac	cegggatet	y agaaggggad	c tgggactte	t ttaaagtgc	2220
	340) accactgaa	a agettetace	, colgaalage	g tgaccggagg	g ccggcacct	t teettttata	a 2280
	341	ctagaggato	acatggaaga	cyccaaaaa	cataaagaaag	geceggege	c attctatcc	2340
	342	cctagaggac	gaaccgctgg	ayaycaacto	j cataaggeta	a tgaagagata	a cgccctggti	2400
	342	ttccaaatat	ttgcttttac	agatgcacat	_ atcgaggtga	acatcacgta	a cgcggaatad	2460
	344	agaatogto	ccgttcggtt	ggcagaagct	t atgaaacgat	atgggctgaa	a tacaaatca	2520
	3/5	tttatagga	tatgcagtga	aaactctctt	caattottta	ı tgccggtgti	c gggcgcgtta	2580
	345	artataga	ttgcagttgc	gecegegaac	e gacatttata	ı atgaacgtga	a attgctcaad	2640
	340	agialyaaca	lillogcaged	: taccqtaqto	ı titgitteda	l aaaaaggggtt	. ucasaaa+	- 2700
	J4 /	LLyaacyLyC	: aaaaaaaatt	accaataato	: cagaaaatta	. ttatcatoga	ttctaaaacc	2760
	240	gallaccagg	gatttcaqtc	gatqtacaco	r ttcqtcacat	ctcatctacc	+ + 0 0 0 0 0 0 + + + +	2020
	343	aacyaacacy	attitgtacc	agagteettt	. gategtgaea	aaacaattoo	actrataato	2000
	330	aatteetetg	gatetaetgg	gttacctaaq	r aatataacco	: ttccgcatad	Laactgootgo	2010
	331	gicagattet	cgcatgccag	agatcctatt	: tttqqcaatc	aaatcattco	ggatactgcc	3000
	332	accttaagtg	ttgttccatt	ccatcacqqt	: tttggaatgt	ttactacact	cogatattt	3060
	333	acacgcggat	ttcgagtcgt	cttaatgtat	agatttgaag	aagagctgtt	tttaccatcc	3120
	334	Cilcaggatt	acaaaattca	aagtgcgttg	ctaqtaccaa	ccctattttc	attettege	2100
	333	aaaaycactc	tgattgacaa	atacqattta	tctaatttac	acqaaattgc	ttetaaaaa	3240
	220	geacetett	cyaaagaagt	cqqqqaaqcq	gttgcaaaac	gettecatet	tecagggata	2200
	331	cyacaaggat	atgggctcac	tgagactaca	tcagctattc	tgattacacc	caaaaaaaat	3360
	550	yacaaaccgg	gcgcggtcgg	taaaqttqtt	ccatttttta	aagcgaaggt	tataaatata	3420
•	333	yacaccggga	aaacgctggg	cgttaatcaq	agaggggaat	tatototoac	aggacctatg	3100
	200	actacycocy	gitatgtaaa	caatccggaa	gcgaccaacg	ccttgattga	022662+662	2540
•	3 O T	Lygolacall	clygagacat	agettaetgg	gacgaagacg	aacacttott	antagttene	2600
•	J U Z	cycligacyl	Cilidalida	atacaaagga	tatcaggtgg	cccccactas	2++0022+00	2660
•	,,,	acactegicate	aacaccccaa	catettegae	acaaacataa	candicttcc	"caacaataaa	2720
	J U 4.	geeggegaae	urccedeede	cattattatt	.ttggaggacg	daaadacdat		2700
-	,05	yayattytyg	allargrege	caqtcaaqta	.acaaccgcga	aaaanttooo	Caasaasatt	2040
-	,00	gregeregegg	acyaagtacc	gaaaggtett	accggaaaac	tegaegeaag	aaaaatcaga	3000
-	, , ,	gagattetta	Laaaggccaa	gaaqqqcqqa	aaqtccaaat	tataaaatat	aactgtatto	3060
-	000	aycyalgacg	aaattcttag.	ctattqtaat	gactctagag	gatetttgtg	aaggaacett	1020
-	,05	acticityty	Lylyacataa	ttqqacaaac	tacctacada	gatttaaage	totaaggtaa	4000
_	,,,	alalaaall	LLLdagtgta	taatgtgtta	aactactgat	totaattott	+ a + a + a + + + +	4140
_	,, _	agattecaac	Claiggaact	gatgaatggg	agcagtggtg	gaatgeettt	aataaaaaa	1200
_	, , 2,	acceguling	Cicagaagaa	atqccatcta	gtgatgatga	ggctactgct	gagtgtgaag	1260
_	,, ,	attetactec	LCCaaaaaag	aaqaqaaaqq	tagaagaccc	caaggacttt	cottoagaat	1220
3	74	tgctaagttt	tttgagtcat	gctgtgttta	gtaatagaac	tettaettae	tttactattt	4320
9	,,,	acaccacaaa	yyaaaaaqct	gcactgctat	acaagaaaat	tatooaaaa	tattatata	4 4 4 0
9	7.0	Cultalaag	Laggcataac	agttataatc	ataacatact	attttttatt	20100000	4 E O O
_		ggcacagage	y Lucy Clatt	aalaactato	CTCaaaaatt	atataaattt	244+++	4560
3	78	tttgtaaagg	ggttaataag	gaatatttga	tatatagtag	ottoactic	ageculuaa	4560
3	79	agccatacca	catttgtaga	ggttttactt	actttaaaaa	acctoccases	gatcataatc	4020
3	80	aacctgaaac	ataaaatgaa	tgcaattgtt	attattaan+	tatttatta-	colococctg	4680
3	81	ggttacaaat	aaagcaatag	catcacaaat	ttcacasata	agantttt	aycttataat	4/40
3	82	tctagttgtg	gtttgtccaa	actcatcaat	atatettata	adycattttt	licactgcat	4800
3	83	ctatagtgag	tcgtattagc	ttaacataat	catagtasts	acycooggat	cccgggtcc	4860
3	84	gttatccact	cacaattcca	Cacaacatac	gagggggaaa=	getgettect	gtgtgaaatt	4920
3	85	gtgcctaatg	agtgagctaa	ctcacattas	ttagattaa=	cataaagtgt	aaagcctggg	4980
			, -jugocaa	ucuclaa	ceycyclycg	cleactgece	gctttccagt	5040

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/957,458

DATE: 06/25/2002 TIME: 10:04:36

Input Set : A:\P66567USO-seqlist.txt Output Set: N:\CRF3\06252002\1957458.raw

380	6 caaaaaacct	atcataccaa	ataasttsst				
38	6 cgggaaacct 7 tgcgtattg	geagtettee	ccycattaat	gaatcggcca	ı acgcgcgggg	, agaggcggtt	5100
388	7 tgcgtattgg	gogotottcc	getteetege	cactgacto	getgegeteg	r gtcgttcggc	5160
389	3 tgcggcgagc	aaaaaaaaa	tacceaaagg	cggtaatacg	gttatccaca	gaatcagggg	5220
390	ataacgcagg	agagatttt	cyaycaaaag	gccagcaaaa	ggccaggaac	: cgtaaaaagg	5280
391	ccgcgttgct	gaggtagaga	cataggetee	gccccctga	cgagcatcac	: aaaaatcgac	5340
392	geteaagtea	gaggugguga	aaccegacag	gactataaag	ataccaggcg	tttccccctg	5400
393	gaageteet	gggaaggata	cougitocga	ccctgccgct	taccggatac	ctgtccgcct	5460
394	tetaggtegt	tagatagasa	gegetttete	aatgctcacg	ctgtaggtat	ctcagttcgg	5520
395	tgtaggtcgt	cogciccaag	cragactata	tgcacgaacc	ccccgttcag	cccgaccgct	5580
396	gcgccttatc	cyglaactat	cgtcttgagt	ccaacccggt	aagacacgac	ttatcgccac	5640
330	, eggeugeage	Cactyytaac	aqqattaqca	gagcgaggta	tataaaaaat	ant sesent	C700
3,7	ccccyaaycy	grygeeraac	tacqqctaca	ctagaaggac	agtatttggt	atotoooto	E760
990	egolguageo	ayttaccttc	uuaaaaaaaa	Traataactc	ttastaaaaa	2222222	F000
2,2	cegetagetag	Cyglygllll	LLLGTTTGCA	agcagcagat	tacacacaaa	22222244	E000
	cccaagaaga	LUCLLLYALU	LLLLCTACGG	ggtctgacgc	tcantnnaan	Tananatana	EOAO
101	gecuagggat	LLLYGLCALG	ayattatcaa	aaaggatett	cacctagate	クナナナナコココナナ	$\epsilon \alpha \alpha \alpha$
402	aaaaatyaay	LLLLadatca	atctaaagta	tatatgagta	aacttaatat	asasatt.	C0C0
403	aatycttaat	cagiyaqqca	cctatctcag	cgatctgtct	atttccttca	+002+20++	C120
101	cctgactccc	cylcylag	ataactacga	Lacgggaggg	cttaccatct	gggggggata	(100
403	cigcaacyac	accycyagae	ccacqctcac	caactccaaa	tttatcagca	ataaaccaacc	6210
400	cayccygaag	ggccgagcgc	agaagtggtc	ctgcaacttt	atcogoctoo	atogaatata	C 2 0 0
407	ccaactytty	CCGGGGaagCE	agagtaagta'	gttcgccagt	taataatta	ogganagette.	C2CA
100	cegecatege	Lacayycalc	qtqqtqtcac	acteateatt	taatataaat	tasttasast	C 4 2 2
400	ccggttccca	acyatcaaqq	cyaqttacat	gatececcat	attatacasa	2224044+2	6400
410	gereerregg	Localogato	gttgtcagaa	gtaagttggc	cacaatatta	tagatagtag	$C = A \cap$
411	ctatygeage	actycataat	tctcttacta	teatgecate	cotagoatoo	ttttatata	CCOO
712	ceggegagea	Cleadecaag	tcattctgag	aatagtgtat	gcggcgaccg	agttggtgt	6660
113	geeeggegee	aatacygyat	aataccqcqc	cacatageag	aactttaaaa.	ataataataa	6720
414	LLyyaaaacy	LLCLLCqqqq	cgaaaactct.	caaggatett	accontatta	agatagaett	6700
113	cyatytaacc	Cactegraca	cccaactgat	Cffcagcatc	ttttaattta	3003000+++	CO 4 0
410	cegggegage	aaaaacayya	aqqcaaaatq	CCCCaaaaaa	gggaataagg	0000000000	ϵ 000
11,	aucyccyaac	acicacacic	LLCCTTTTC	aatattatto	aagcatttat	Caddattatt	6060
110	gccccacyay	cygatacata	tttqaatqta	tttagaaaaa	taaacaaata	agaattagaa	7020
マエノ	gcacatttcc	ccyaaaagtg	ccacctgacg	tetaagaaac	cattattato	2+4242+42	7000
120	cctutadaaa	Layycy Late	acqaqqccct	TTCatctcac	acatttcaat	antanaa++	7140
121	addacetety	acacatycay i	ctcccggaga	Cootcacacc	ttatatataa	acaaataaaa	7200
	ggagcagaca	ayoutgicay (ччсчсчтсач	caaatattaa	caaatatcaa	agatagatta	7260
123	actatgcggc	arcayaycay a	attqtactqa	gagtgcacca	tatocootot	annatagaaa	7220
127	acagatycyt	aayyayaaaa	taccqcatca	ggcgccattc	accatteaga	ataaaaaa	7200
123	guuggaagg	gegaleggiq (cqqqcctctt.	COCtattaco	ccaactaaca	22200000+	7440
120	g cyclycady	ycyallaayl I	Lyggtaacgc	cagggttttc	ccagtcacga	cattataaaa	7500
427	cgacggccag	tgaatttcga (cctgcagtcg .	actttttta	tatatacagg	aggeegag	7558
						- > > C Y u Y	, ,,,,,

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/09/957,458

DATE: 06/25/2002 TIME: 10:04:37

Input Set : A:\P66567US0-seqlist.txt
Output Set: N:\CRF3\06252002\1957458.raw

Use of n's or Xaa's(NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing. Use of <220> to <223> is MANDATORY if n's or Xaa's are present. in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:1; N Pos. 39,40,41,87,650,657,679,723,762,764,792,834,858,863,874,880
Seq#:1; N Pos. 891,904,918,927,929,935,944,954,959,967,968,969,972,994,1003
Seq#:1; N Pos. 1012,1026,1027,1038,1040,1041,1047,1050,1066,1068,1070,1076
Seq#:1; N Pos. 1104,1114,1115,1117,1120,1123,1126,1133,1138,1149,1153,1169
Seq#:1; N Pos. 1170,1171,1172,1173,1174,1664,1665,1666,1667,1668
Seq#:3; N Pos. 35,36,82,645,652,674,718,757,759,787,829,853,858,869,875,886
Seq#:3; N Pos. 899,913,922,924,930,939,949,954,962,963,964,967,989,998,1007
Seq#:3; N Pos. 1021,1022,1033,1035,1036,1042,1045,1061,1063,1065,1071,1099
Seq#:3; N Pos. 1109,1110,1112,1115,1118,1121,1128,1133,1144,1148,1164,1165
Seq#:3; N Pos. 466,467,468,469,470,471,472,473,474,475,476,2280,2281,2282

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/957,458

DATE: 06/25/2002 TIME: 10:04:37

Input Set : A:\P66567US0-seqlist.txt
Output Set: N:\CRF3\06252002\I957458.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:28 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:1 M:340 Repeated in SeqNo=1 L:302 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3 M:340 Repeated in SeqNo=3 L:717 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6 L:717 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420 L:747 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6 L:747 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6 L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2220 L:748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2220 L:748 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6 L:748 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:748 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:748 M:358 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:748 M:358 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2280